Vendor Profile
SAP AG

US Address	SAP America, Inc. 3999 West Chester Pike Newtown Square, PA 19073 (610) 661-1000 (610) 355-3106
Year Founded	1972
Annual Revenue	$9.7 billion
Number of Employees	31,000+

1.1 Overview

SAP AG (SAP) is a provider of business software solutions. Its principal activities are the development, marketing, sales and support of a variety of software solutions, primarily enterprise application software products for organizations, including corporations, governmental agencies, aerospace and defense, and educational institutions. mySAP Business Suite solutions are helping enterprises around the world improve customer relationships, enhance partner collaboration and create efficiencies across their supply chains and business operations. The Company has more than 26,000 customers in over 120 countries that run more than 88,700 installations of SAP software.

1.2 Financial Results

[1]The following financial results are provided to document SAP's fiscal viability. [2]

[1] Source: Wall Street Journal.

[2] Based on Euro to Dollar exchange rate on 12-April-2005.

Year Ended	12/31/2004	12/31/2003	12/31/2002	12/31/2001	12/31/2000
Software Revenue	3,050,357	2,774,623	2,959,689	3,333,952	3,176,599
Total Other Revenue	6,658,143	6,300,957	6,617,476	6,150,147	4,917,070
Total Revenue	9,708,500	9,075,580	9,577,164	9,484,099	8,093,669
Total Operating Expense	7,100,812	6,848,199	7,476,837	7,788,551	7,056,659
Operating Income	2,607,688	2,227,381	2,100,327	1,695,548	1,037,010

(Euro/Dollar exchange= 1.29197)

1.3 ERP Products

[3]SAP is a leading packaged-business application provider. Its products include R/3 Enterprise Core, its enterprise resource planning offering, mySAP, its e-business application suite and numerous application extensions. SAP's customer base is primarily comprised of large enterprises, of which 80 percent are R/3 customers and 20 percent are mySAP customers.

In addition to its core product offering, SAP offers additional components that can be "bolted on" to the core product in order to extend its functionality. Independent software vendors also offer numerous specialized products that can be integrated with SAP's Business Suite (R/3) to extend its functionality. For more information about third-party bolt-on products, see Bolt-ons page.

1.3.1 SAP Core Components

The SAP product portfolio is based on R/3. The core R/3 components have been Web-enabled and are offered as the mySAP suite of products. The core components of mySAP, include[4]:

- mySAP ERP -- This solution provides end-to-end functionality for
  - Financials,
  - Human Capital Management,
  - Operations,
  - Corporate Services.

[3] Source: Gartner

[4] See http://www.sap.com/solutions/index.epx

1.3.2 Bolt-on Products

ERP products are packaged as a core set of functions that the vendor believes will be generally applicable in its target market. The products can be extended to accommodate additional functionality, specific to an industry segment or to a particular customer, by adding software components via some form of configuration or external integration point. SAP refers to these product extensions as “Add-ons.”

These extensions can be further classified, in order by complexity and scope, as:

- Add-in—Fine-grained functionality that enhances an existing component. Add-ins accommodate user requirements too specific to be included in the core product. An example of an add-in might be a specific benefit calculation in an HR component.
- Add-on—Components provided by the vendor, a third party, or a customer that extend the functionality of the core product. Add-ons may be packaged with the core product, and “turned on” by configuring the application. Other add-ons are provided as separate software components that are seamlessly integrated with the core product.
- Bolt-on—Third-party applications that provide supplemental functionality, not provided by the vendor product, or that a customer elects to use in place of the ERP vendor’s solution. Bolt-ons span a wide range of applications from report generators to full logistics systems.

SAP provides numerous product extensions that provide specialized functionality for specific industry segments or functional areas within an enterprise.

- mySAP Business Suite
- SAP xApps
- SAP Manufacturing
- SAP Service and Asset Management
- SAP solutions for mobile business
- SAP Analytics

SAP also provides a set of integration tools and technologies that enable third-party vendors and customers to integrate their software with SAP solutions seamlessly to extend the functionality of the core product. SAP uses the term Add-on to refer to:

- Industry Solutions,
- Plug-ins,
- Customer-specific development projects.

An Add-On Installation Tool is provided by SAP to enable users to install and upgrade add-ons directly from their SAP System

SAP offers integration and certification services to its third-party software development partners. These services include an interface certification program, consulting, and access to test systems. SAP third-party software partners may qualify in two categories:

- Software partner
- Content partner

The SAP NetWeaver Partner Initiative is an extension of the company's partner program and is considered by SAP to be a critical ingredient for successful delivery of application components that are compliant with their Enterprise Services Architecture (xApps).

SAP xApps are a category of application extensions, developed by SAP and SAP Certified Partners, for specific industry segments. The portfolio of xApps on this publication date includes:

- SAP xApp Cost and Quotation Management (SAP xCQM) -- Helps manufacturing companies estimate internal and external costs better and submit more accurate quotes
- SAP xApp Emissions Management (SAP xEM) -- Enables energy-consuming and carbon dioxide-producing businesses to comply with environmental regulations
- SAP xApp Integrated Exploration and Production (SAP xIEP) -- Creates an enterprise-wide operating environment to optimize the exploration and production (E&P) life cycle
- SAP xApp Product Definition (SAP xPD) -- Helps translate ideas into products
- SAP xApp Resource and Portfolio Management (SAP xRPM) -- Improves the ability to manage and execute enterprisewide portfolios of IT or R&D projects
- SAP Global Trade Services (SAP GTS) -- Automates and streamlines complex cross-border trade processes, and helps manage international trade risks

The xApp program is a relatively new initiative and the application portfolio will continue to grow.

1.4 Enterprise Application Integration (EAI)

SAP NetWeaver is the integration and application platform that forms the foundation of the mySAP Business Suite family of solutions. It is also the technical enabler that supports the evolution to Enterprise Services Architecture, which delivers a blueprint for services-based, enterprise-scale business solutions.

At the date of this publication, SAP NetWeaver consists of the following products:

1. SAP® Web Application Server
2. SAP® Enterprise Portal
3. SAP® Business Information Warehouse
4. SAP® Exchange Infrastructure

5. SAP® Knowledge Management
6. SAP® Mobile Infrastructure
7. SAP® Master Data Management
8. SAP® Composite Application Framework
9. SAP® Lifecycle Management

Figure 1 illustrates the NetWeaver environment and components and how they relate to other SAP and third-party applications.[5]

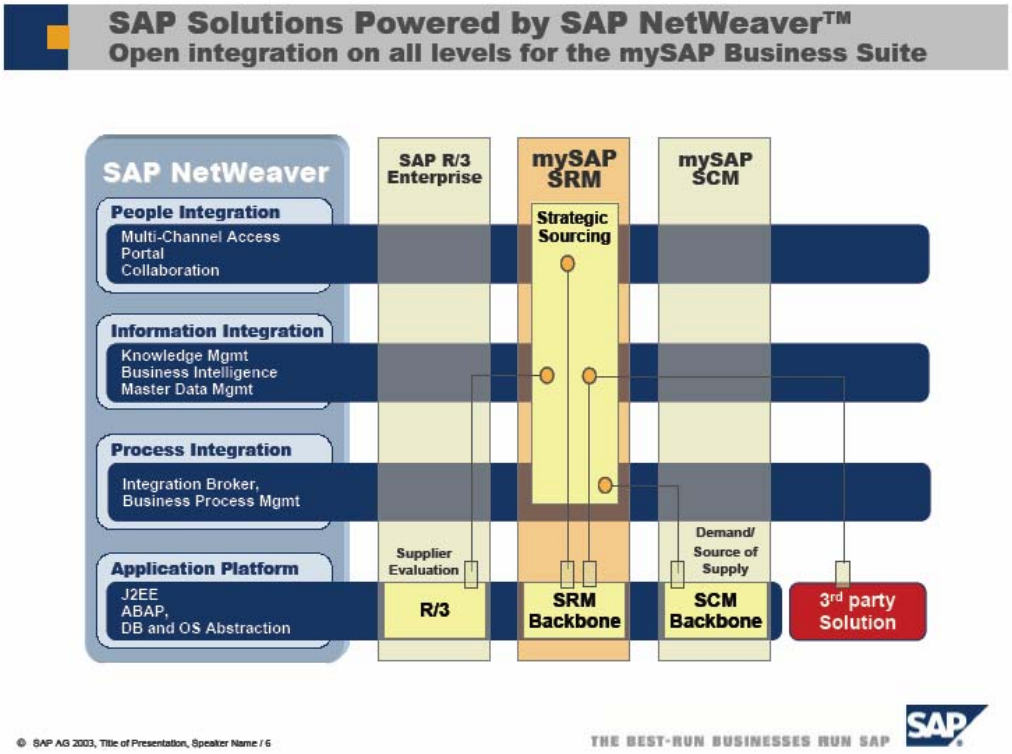


Figure 1. SAP NetWeaver

According to SAP, NetWeaver is a "Comprehensive Integration and Application Platform" that has become the foundation of xApps and the mySAP™ Business Suite of products.

“SAP is evolving its solutions according to the Enterprise Services Architecture blueprint. We have already released several solutions that leverage this approach, including mySAP Customer Relationship Management, mySAP Supplier Relationship

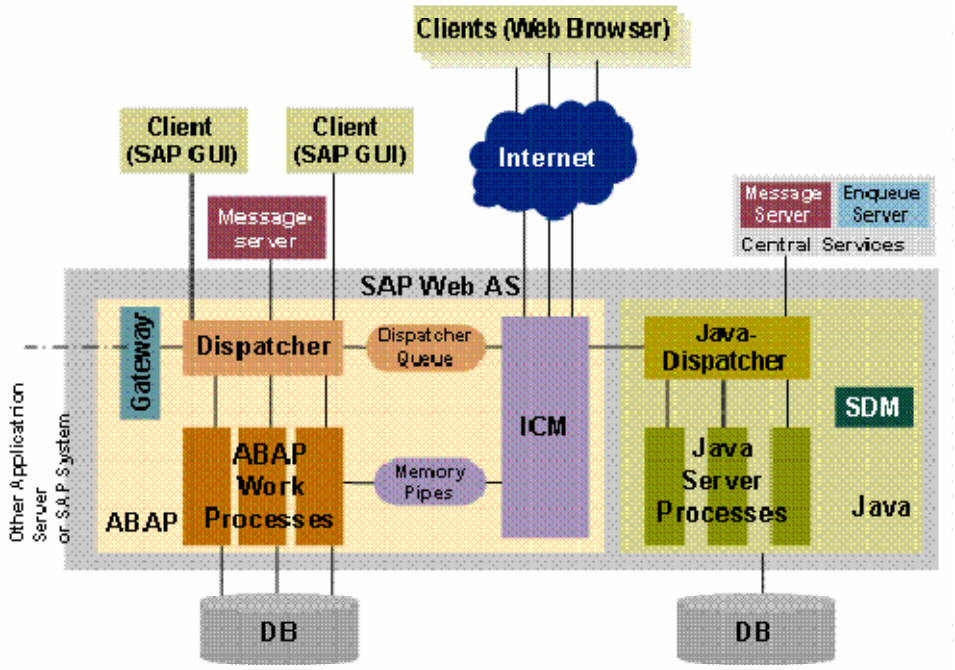
[5] Source is SAP presentation titled, “SAP NetWeaver Training Overview,” dated 11 Feb 2004.

Management, and SAP xApps packaged composite applications. Soon SAP will release solutions that are designed from the ground up according to Enterprise Services Architecture," http://www.sap.com/solutions/netweaver/technicaldetails/esa.epx

The SAP Application Server provides the environment in which instances of SAP are executed. An SAP System may contain several application servers. These communicate with the presentation server, the database server and with each other. The most important components of an application server are its work processes. Other components are the SAP Gateway and the Internet Communication Manager (ICM).

The SAP Web Application Server is the application platform for SAP NetWeaver. The SAP Gateway is a key component of the Application Server and enables SAP Systems and external programs to communicate with one another. The Gateway provides CPI-C[6] services, which are based on TCP/IP. Each instance of an SAP System has a gateway. The gateway enables communication between server processes and external programs, as well as communication between server processes from different instances or SAP Systems.

Figure 2 illustrates the components of the SAP Web Application Server.



[6] The *Common Programming Interface - Communications* (CPI-C) is a standard call interface for applications which require direct program-to-program communication. SAP's CPI-C implementations support the *X/Open Developers' Specification - CPI-C*.

Figure 2. SAP Web Application Server

Some other components of the server, relevant to EAI, are described below:

- The Internet Communication Manager (ICM) sets up the connection to the Internet. It can process both server and client Web requests. It supports the protocols HTTP, HTTPS, and SMTP. The SAP Web AS can behave as a Web server or as a Web client (see SAP Web Application Server: Web Server or Web Client)
- The dispatcher distributes the requests to the work processes. If all the processes are occupied the requests are stored in the dispatcher queue.
- The SAP Gateway makes the RFC interface between the SAP instances available (within an SAP System and beyond system boundaries).
- The message server exchanges messages and balances the load in the SAP System.

For more information about the Web Application Server, see http://help.sap.com/saphelp_nw04/helpdata/en/84/54953fc405330ee10000000a114084/frameset.htm.

1.5 Methodology

SAP has branded their full lifecycle framework ValueSAP (VSAP). The AcceleratedSAP (ASAP) methodology is SAP's implementation methodology, under the ValueSAP umbrella. ASAP is SAP's approach to implementing the company's solutions across industries and environments. As stated by SAP, ASAP is specific to implementation of SAP solutions—it is not a generally applicable solution implementation methodology.

1.5.1 SAP AcceleratedSAP

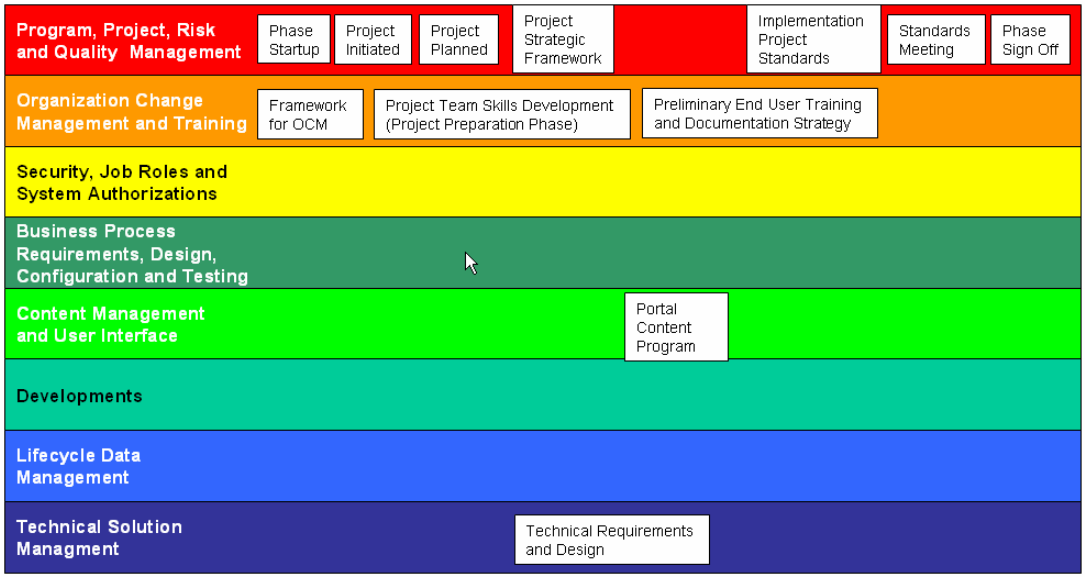
ASAP was released as SAP's recommended implementation methodology in 1997. It is a phased implementation approach with processes that closely parallel the leading software development methodologies.

1.5.1.1 Phases

ASAP defines five phases for product implementation projects. For more information, see the SAP presentation titled, "ASAP Implementation Roadmap," dated Aug 2004.

Phase 1: Project Preparation

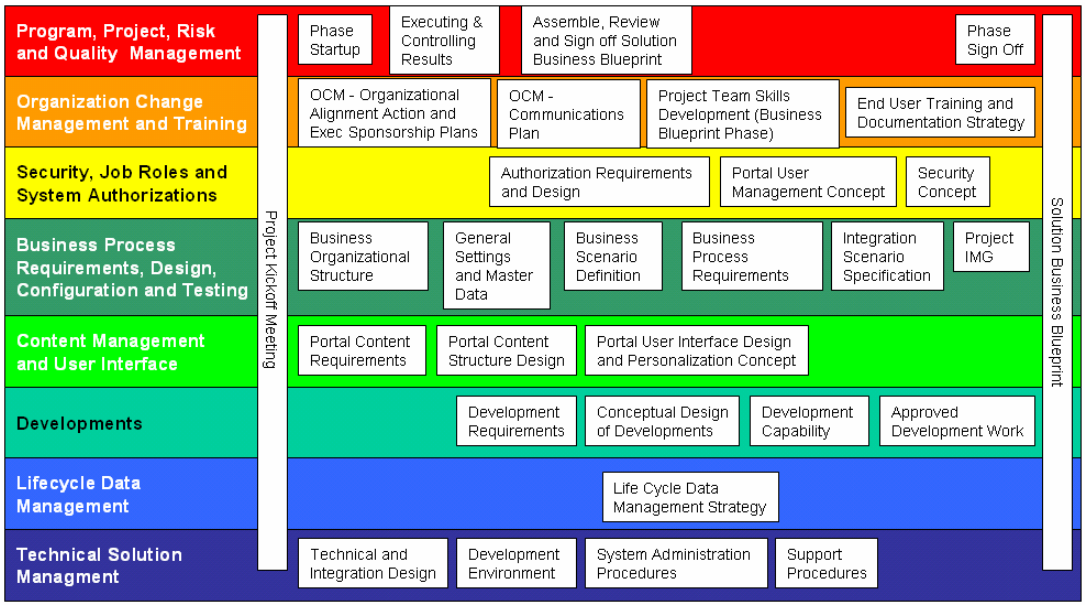
During this phase the team goes through initial planning and preparation for SAP project.



The steps in Phase 1 help identify and plan the primary focus areas that need to be considered.

Phase 2: Business Blueprint

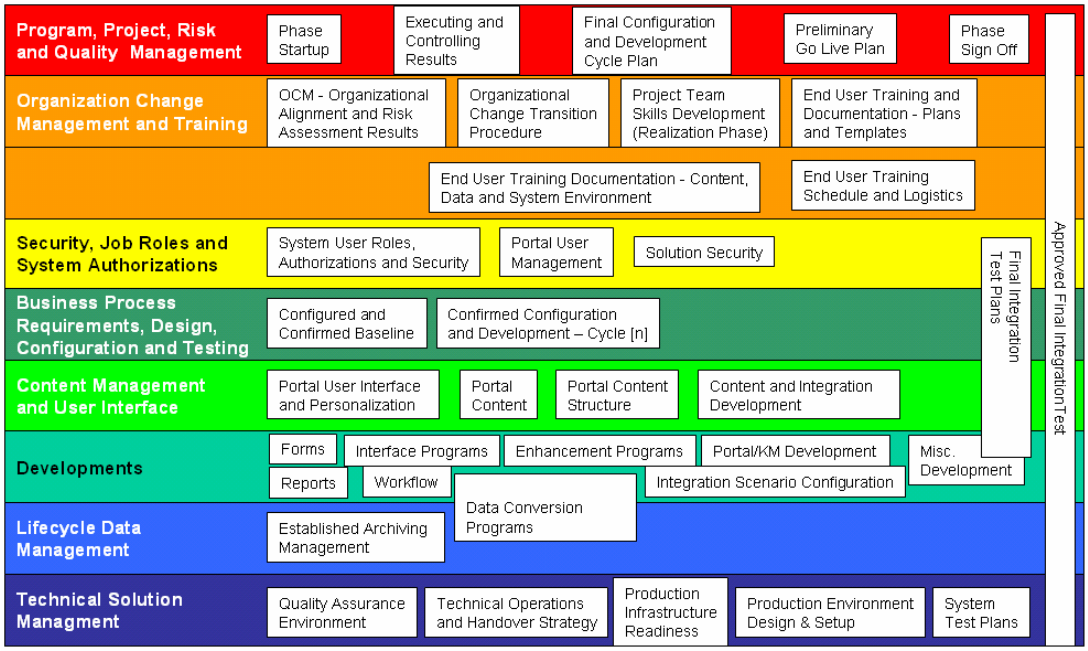
The purpose of this phase is to achieve a common understanding of how the company intends to run SAP to support its business. The result is the Business Blueprint, detailed documentation of the results gathered during requirements workshops.



The Business Blueprint documents the company's business process requirements.

Phase 3: Realization

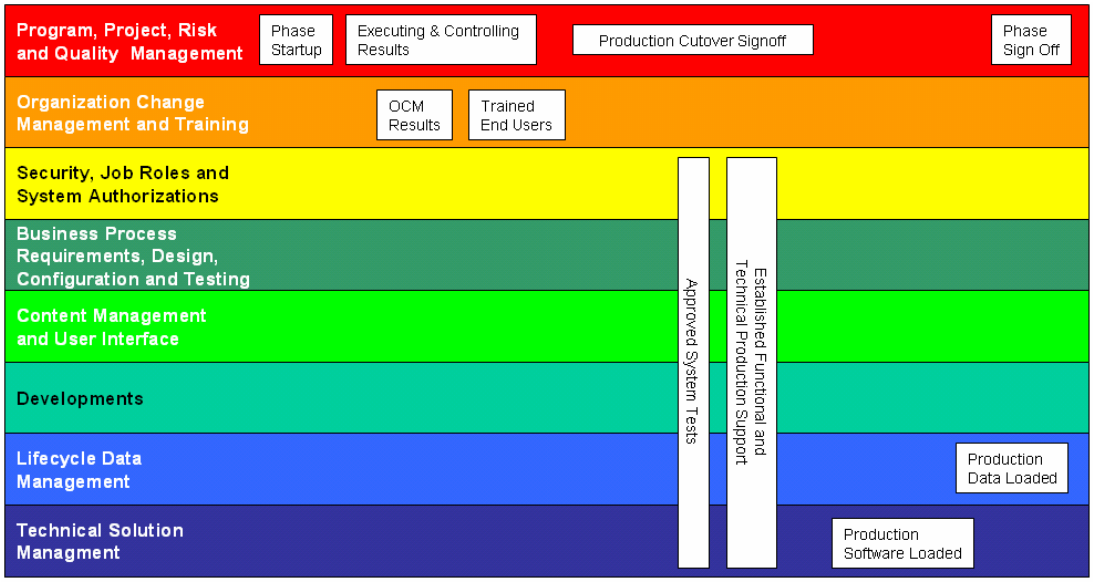
The purpose of this phase is to implement all the business process requirements based on the Business Blueprint. The system realization methodology is provided in two work packages: Baseline (major scope); and Final configuration (remaining scope).



The objectives are final implementation of the system, an overall test, and release of the system for production (live) operation. In addition, the project team receives relevant knowledge.

Phase 4: Final Preparation

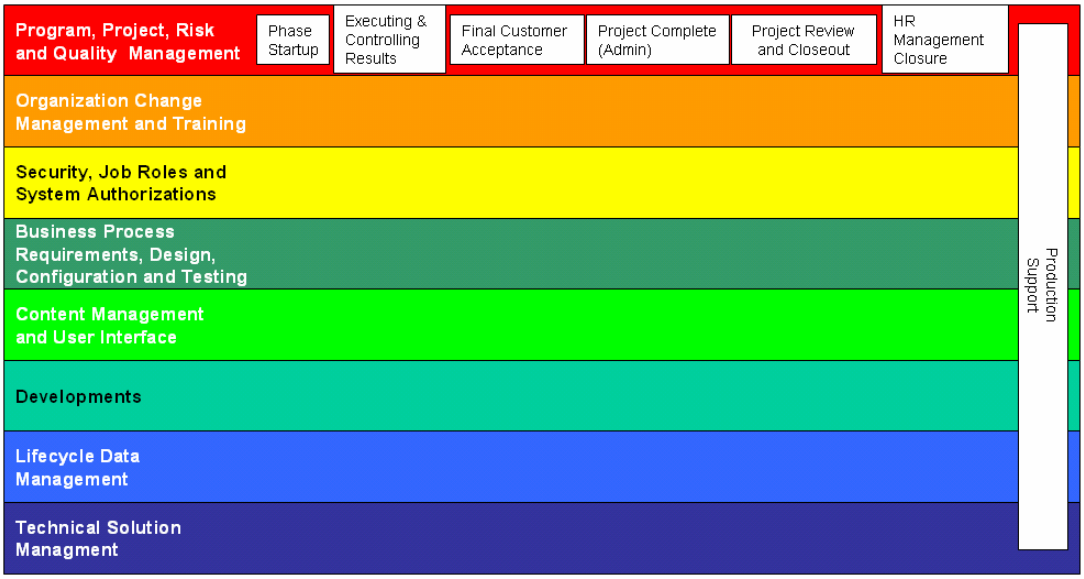
The purpose of this phase is to complete the final preparation (including testing, end user training, system management and cutover activities) to finalize readiness to go live. The Final Preparation phase also serves to resolve all critical open issues.



On successful completion of this phase the SAP System is ready to go live.

Phase 5: Go Live & Support

The purpose of this phase is to move from a project-oriented, pre-production environment to live production operation.



1.5.2 Roadmaps

SAP provides roadmaps as guides for specific types of activities.

- **Customer Solution Strategy**. This ValueSAP Roadmap is used in the Discovery and Evaluation phase of ValueSAP by customers who are designing a new information technology infrastructure. Besides the Program Charter, a "Strategy Blueprint" containing the initial Customer Solution Map, as well as specific Key Performance Indicators defined for the particular customer's business, form part to the deliverables of this Roadmap.
- **Implementation**. The Implementation Roadmap for SAP Solutions provides the methodological framework for the project team to leverage in the implementation of a SAP solution. It covers, among other things, the necessary project management, requirements gathering, design, configuration of business processes, technical implementation, test procedures, training and organization change management.

  In this roadmap deliverables represent the main objects within a project. Each deliverable provides an outline of the Outputs (components creating the deliverable) and relevant Methods that represent the activities and tasks the project team conducts.
- **Global Template**. The Global Template Roadmap describes how to organize and how to run a project in which a corporate template is developed. The Global Template Roadmap is geared to more complex implementation or harmonization projects, typically involving more than one kind of SAP solution, and a variety of sites, possibly in different countries. The corporate template is rolled out to other sites in a follow-up project.
- **Upgrade**. This roadmap is designed to help carry out the customizing activities required for an upgrade. These customizing activities are essential to the continued use of the same application components after an upgrade.
- **Solution Management**. The Solution Management Roadmap provides a methodology for the implementation of the technical infrastructure and its operation. The Solution Management Roadmap complements the Implementation Roadmap.

1.6 Reference Models

SAP's Reference Models are based on the suite of ERP products portrayed in the following landscape diagram, Figure 3. The SAP product suite includes Solution Manager, a tool that allows customers to generate a Reference Model specific to their functional requirements. SAP describes the functionality provided by Solution Manager—relevant to the Reference Model--as follows.

- **mySAP Business Suite implementation** -- SAP Solution Manager provides content that accelerates implementation. Configuration information and a process-driven approach to implementation speed the blueprint, configuration, and final preparation phases. SAP Solution Manager enables efficient project administration and centralized control of cross-component implementations.

- **Global rollout** -- The toolset eases process standardization and harmonization across organizations and locations by providing proven methodologies and all necessary functionality. Configuration settings needn't be re-entered into local components.
- **Synchronization of custom settings** -- SAP Solution Manager helps customers maintain consistency as they customize heterogeneous IT environments. It enables safer administration of customization, less error-prone replication of custom settings, and simpler consistency checks.
- **Testing** -- SAP Solution Manager speeds test preparation and execution. It provides a single point of access to the complete system landscape and enables centralized storage of testing material and test results to support cross-component tests.

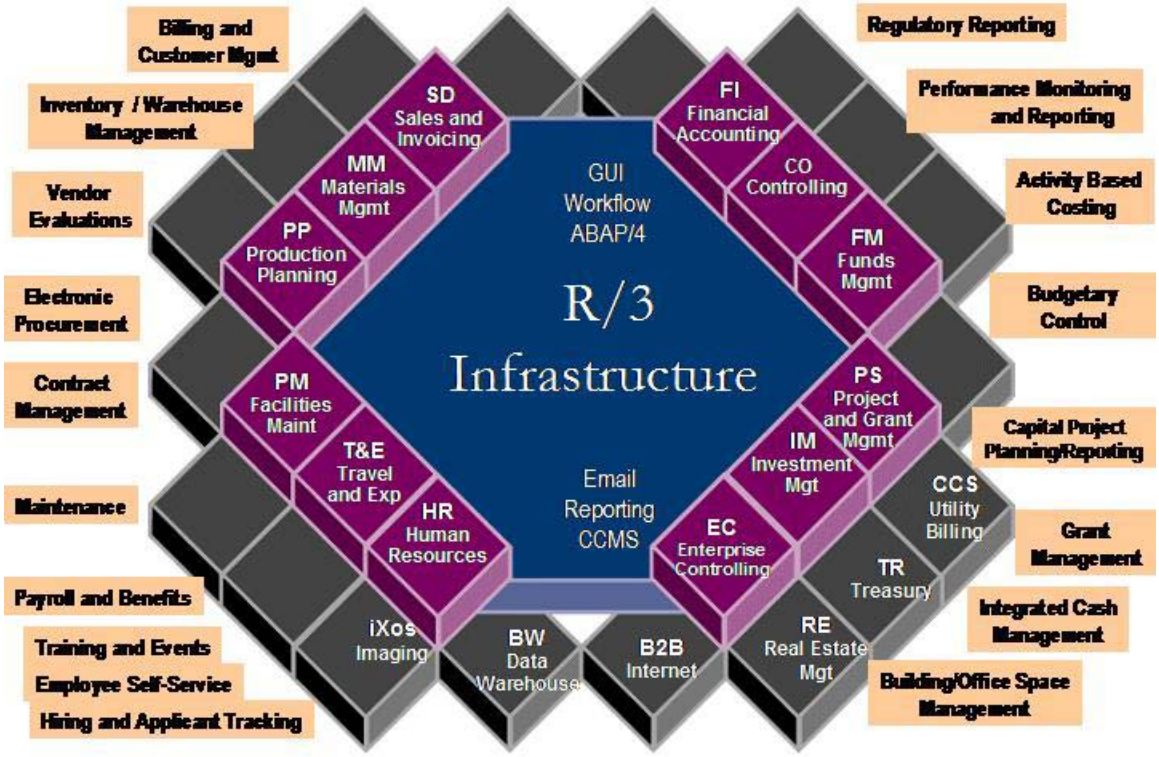


Figure 3. SAP ERP Landscape

The SAP project-specific reference model, driven by requirements defined through Solution Manager, takes the form of a Business Blueprint.

For a complete list of SAP Reference Model components, refer to Appendix A.

1.7 Strengths and Weaknesses

Any assessment of strengths and weaknesses in a product is relative to the intended use of the product. Strength in one context may be a serious weakness in another. For example, a closely-coupled software implementation pattern that enables an application to provide sub-second response is a strength in a situation where such response is essential to the Warfighter. That same pattern would be a serious weakness in a business systems context, where it would render the software difficult to maintain and change.

The following list of SAP's strengths and weaknesses is based on the

- Maturity and stability of the company's relevant product offerings,
- Viability of the vendor in the marketplace—financial strength and market share,
- Technology used to implement the product suite.

Product strengths and weaknesses are outside the scope of this document.

1.7.1 Strengths

SAP's strengths include:

- SAP has focused on producing products and services for the business application market. SAP's early suite of business solutions, developed in 1972, evolved into today's Web-enabled Enterprise Resource Planning (ERP) suite--mySAP.
- SAP has dominated the ERP solution space for many years. Even after recent consolidation in its market segment, SAP's products represent approximately 55% of the ERP solutions in production.
- Although SAP developed its original business solutions in the 1970s, the company has continuously evolved its technology base, application architecture, and the application functionality that those new technologies have enabled. The most recent evolution is the "web enabling" of its products, and its evolution to a component, services-based architecture.
- SAP's partner integration and certification program helps ensure the quality of third-party bolt-on products.

1.7.2 Weakness

SAP's weaknesses include:

- SAP continues to suffer from the perception that its products are difficult to deploy and maintain. Total cost of ownership is perceived to be much higher than the initial product acquisition and implementation cost.

Appendix A

SAP Modules	SAP Standard Business Processes
R/3	
Product Data Management	
	Product Trigger
	Product Definition/Development
	Product Service
	Engineering Change Management
	Product Data Distribution
Production Planning and Procurement Planning	
	Market-Oriented Planning
	Sales Order Oriented Planning
	Consumption-Driven Planning
	Distribution Requirements Planning
Procurement	
	Procurement of Materials and External Services
	Procurement via Subcontracting
	Procurement on a Consignment Basis
	Internal Procurement
	Pipeline Processing
	Source Administration
	Return Deliveries
Production	
	Discrete Production
	Repetitive Manufacturing
	Process Manufacturing
	Production Supply with KANBAN
Sales and Distribution	
	Pre-Sales Handling
	Sales Order Processing (Standard)
	Sales Order Processing: Make/Assembly To Order
	Cash Sales/Rush Order Handling
	Third-Party Order Processing
	Consignment Processing
	Intercompany Handling
	Sending Samples and Advertising Materials

	Empties and Returnable Packaging Handling
	Complaints Processing
	Rebate Processing
	Foreign Trade Processing
	Deliver Processing
	Invoicing
	Pricing
Inventory Management, Warehouse Management and Transportation	
	Goods Movements
	Physical Inventory & Cycle Counting
	Decentralized Warehouse Management
Customer Service	
	Long-Term Service Agreements
	Call Center Processing
	Spare Parts Delivery Processing
	Repairs Processing at Customer (Field Service)
	Repairs Processing in Service Center (Inhouse)
Plant Maintenance	
	Breakdown Maintenance Processing
	Planned Maintenance Processing
	Project-Based Maintenance Processing
	Refurbishment Processing in Plant Maintenance
Quality Management	
	QM in Materials Management
	QM in Production
	QM in Sales and Distribution
	Test Equipment Management
Environment, Health and Safety	
	Basic Services and Tools
	Product Safety
	Master Data Processing Dangerous Goods Without Specification Database
	Master Data Processing Dangerous Goods with Specification Database
	Waste Management
	Industrial Hygiene and Safety
	Occupational Health
Project Management	
	Initiation

	Planning
	Execution
	Closing
Financial Accounting	
	Basic Settings
	General Ledger Accounting
	Accounts Payable
	Accounts Receivable
	Bank Accounting
	Special Purpose Ledger
	Valuation of Balances Relevant to Balance Sheet
	Consolidation
	Funds Management
Treasury	
	Stocks [TR-SE]
	Subscription Rights [TR-SE]
	Bonds [TR-SE]
	Warrants [TR-SE]
	Warrant Bond [TR-SE]
	Convertible Bond [TR-SE]
	Process Deposit at Notice [TR-MM]
	Commercial Paper [TR-MM]
	Process Fixed-Term Deposit [TR-MM]
	Cash Flow Transactions [TR-MM]
	Currency Options [TR-FX]
	Forex Spot, Forward and Swap Transactions [TR-FX]
	Listed Derivative Transactions [TR-DE]
	Process OTC Derivative Transactions [TR-DE]
	Options on Interest Rate Instruments and Securities [TR-DE]
	Mortgage Loans Given [TR-LO]
	Mortgage Loans Taken [TR-LO]
	Refinancing Loans [TR-LO]
	Policy Loans [TR-LO]
	General Loans Given [TR-LO]
	General Loans Taken [TR-LO]
	Trading with Borrower's Notes [TR-LO]
	Cash Position [TR-CM]

	Liquidity Forecast [TR-CM]
	Financial Budgeting [TR-CBM]
	Evaluation of Actual Values [TR-CBM]
	Market Risk Management [TR-MRM]
Revenue and Cost Controlling	
	Profit and Cost Planning
	Actual Cost/Revenue Allocation
	Period-End Closing (Controlling)
Enterprise Controlling	
	Operational Business Planning
	Strategic Business Planning
	Consolidation
	Executive Information System (EIS)
Asset Accounting	
	Handling Fixed Assets
	Handling of Leased Assets
	Investment Program Handling [Capital Investments]
	Handling Simple Investment Measures
	Handling Complex Investment Measures
	Direct Capitalization
Real Estate Management	
	Real Estate Management
Organizational Management	
	Planning of Organizational Plan
	Planning Staff Assignment and Changes
Personnel Administration	
	Personnel Actions
Recruitment	
	Recruitment
Personnel Development	
	Personnel Development Planning
	Personnel Appraisal
Compensation Management	
	Compensation Planning
	Long-Term Incentives
	Personnel Budget Planning
	Job Pricing

	Personnel Cost Planning
Benefits Administration	
	Benefits Administration
	Employee Self-Service
	COBRA
	Health Insurance Claim
Personnel Time Management	
	Personnel Time Management
	Interfaces
	Personnel Shift Planning - Operative
Payroll	
	International Payroll
	Payroll - Country Specific
Training and Event Management	
	Basics
	Business Event Planning and Performance
	Business Event Attendance Administration
	Room Reservation Management
	Interfaces
HR Funds and Position Management	
	Integration with HR Master Data and Organizational Management
	Additional Integration with Funds Management and Payroll
Travel Management	
	Presettings for Travel Management
	Travel Request
	Travel Planning
	Travel Expenses
Retail	
	Master Data
	Strategic Sales
	Purchasing
	Merchandise Logistics
	Sales
	Store Connection
	Planning and Information Systems
	Cross-Application Processes
Industry Solution	

	Industry Solution
General Master Records	
	Material Master
	Material BOM
	Service Master
	Batch
	Central Business Partner
	Serial Numbers
	Handling Unit
	Work Center
	Customer Master Record
	Vendor Master Record
	Bank/Bank Directory TR/FI
	Taxes
APO	
Master Data	
	Core Interface - Integration Model
	APO Master Data
Demand and Supply Chain Planning	
	Integrated Demand Planning with APO DP, R/3 and OLTP
	Integrated Supply Planning with APO SNP, R/3 and OLTP
	Integrated Order Processing with APO PP/DS, R/3 and OLTP
	Strategic Supply Chain Planning with APO ND
Order Fulfillment and Availability Check	
	Strategic ATP Decisions
	Product Allocations During Sales Order entry
	Availability Check during Sales Order entry
	Availability Check with Third Party Order / Global Fulfillment
Collaborative Planning	
	Customer Collaboration
	Supplier Collaboration
	Integrated Vendor Managed Inventory with APO, R/3 and customer
Transportation and Supply Chain Planning	
	Strategic Supply Chain Planning with APO ND
	Integrated Transportation Forecast Planning with APO DP, R/3 and OLTP
	Integrated Network Planning with APO SNP, R/3 and OLTP
	Integrated Vehicle Scheduling with APO TP/VS, R/3 and OLTP

SEM	
Business Planning and Simulation (SEM-BPS)	
	Master Data
	Data Modeling
	Planning Modeling
	Information System
	Tools
	Task Functions on Information System
	Task Functions on Tools
Business Consolidation (SEM-BCS)	
	Master Data
	Preparatory Work: General
	Preparatory Work: Integration
	Preparatory Work: Production
	Processes of the Data Monitor
	Processes of the Consolidation Monitor
	Information System
Corporate Performance Monitor (SEM-CPM)	
	Balanced Scorecard
	Management Cockpit
	Measure Builder
B-to-B Procurement	
Business-to-Business Procurement	
	Master Data
	Operational Procurement & Direct Procurement
	Professional Procurement
	Component Planning
	Functions for External Business Partners
	Procurement Cards
	System Administration
BW	
Questions	
	Questions
Logical data model/Business measures	
	Business Content Measures (SAP Delivered)
	Template company specific measures (copy template)

CRM	
Master Data	
	Business Partner
	Product
	Product Catalog
	Service Interaction Center
	Internet Service
	Solution Database
Processes	
	General
	Activity
Field Sales	
	Business Partner Management
	Management of Contact Persons
	Product & Services Management
	Management of Common Functionality
	Classification Management
	Activity Management
	Activity Reporting management
	Opportunity Management
	Promotion & Campaign Management
	Sales Documents Management
	Agreements - Contracts
	Agreements - Conditions
	Agreements - Listings
	Reporting
Field Service	
	Mobile Service Agreement
Internet Sales	
	General
	Business to Business
	Business to Consumer
Service Interaction Center	
	Front Office
	Reporting (for internal sales)
	Results search Using Solution Database

Internet Customer Self Service	
	Service Processing
	Solution Search Using Solution Database
	Display Solution
	Log in
	Send Service Request
	Overview of My Service Requests
	Solution Database - Data Maintenance (for internet sales)
Telesales	
	Organization
	Contact Center Scope Definition
	Generic Functionality
	Sales
	Customer Interaction Center
	SAPphone Interfaces to CTI
	Reporting
Activity Management	
	Create Activity
	Maintain Activity
Opportunity Management	
	Orientation
	Process Opportunity
	Sales Cycle
	Partner
	Forecast
	Classification
	Texts
	Organization
	Assign Products
	Attachments
Marketing Planning	
	Marketing Plan Management
	Campaign Management
	Target Group Selection
	Personalized E-mail
Pervasive Service	
	Pervasive Service

Solution Database	
	Data Maintenance
Infrastructure	
	Service Interaction Center
	Marketplace
	Workplace
	Business Connector
Market Place	
Buy Side	
	Buy Side
Sell Side	
	Sell Side
Workplace	
Workplace	
	Workplace
Cross-Application Components	
European Monetary Unit: Euro	
	Additional Functions for the Euro
	Local Currency Changeover
	Currency Customizing and Handling for Euro
Document management system	
	Documents
	Document Structures
	Document Search
	Document Distribution
Classification System	
	Characteristics
	Classes
	Classification
	Object Selection
	Environment
CAD Integration	
	Objects Supported
	CAD Function Libraries
Business framework architecture	
	Data Transfer Workbench

	Application-Side BAPIs
	ALE Business Process Library
	Transceiver
Central Business Partner	
	Business Partner (CA)
	Business Partner Relationship (CA)
General Application Functions	
	Cross-Application Mass Maintenance
	Technical Application Support
	Business Application Support
	Mathematical Functions
	Data Retention Tool
	Scheduling
Personalization	
	Personalization
Idoc interface for EDI	
	Idoc Interface for EDI
Computer aided test tools applications	
	CATT Modules and Test Cases
	CATT Enhancement
Open information warehouse	
	Open Information Warehouse
Time Sheet	
	Time Sheet
Data Archiving	
	Data Archiving
Global Organization Customizing	
	Global Organizing Customizing
Middleware (CRM)	
	Middleware (CRM)
Palm Pilot (CRM)	
	Palm Pilot (CRM)
Field Sales/Field Service (CRM)	
	MS Office
	MS Outlook
	Mail System
	Infocenter

	Configuration (SCE)
	Pricing (SPE)
	Text Engine
	Expert Selection
IPC (Internet Pricing and Configuration-CRM)	
	IPC (Internet Pricing and Configuration-CRM)
Pervasive Service (CRM)	
	Pervasive Service (CRM)
Knowledge Warehouse	
Knowledge Warehouse	
	Knowledge Warehouse